**National Highway Traffic Safety Administration**

**49 CFR Part 571**

**[Docket No. NHTSA-2022-00199]**

# Federal Motor Vehicle Safety Standards; Denial of Petitions for Rulemaking

**AGENCY**: National Highway Traffic Safety Administration (NHTSA), U.S. Department of Transportation (DOT).

**ACTION**: Denial of petitions for rulemaking.

**SUMMARY**: This document denies the September 27, 2021 petitions for rulemaking submitted by the Small Business in Transportation Coalition (SBTC) ("petitioner"). The petitioner requested that the agency initiate rulemaking to establish a new Federal motor vehicle safety standard (FMVSS) on the installation of electronic logging devices (ELDs), and to amend existing FMVSSs for heavy vehicle braking and accelerator control systems (i.e., FMVSS Nos. 105, 121, and 124). NHTSA is denying the petitions based on a lack of information necessary under the National Traffic and Motor Vehicle Safety Act and the allocation of agency resources.

**FOR FURTHER INFORMATION CONTACT**:

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**SUPPLEMENTARY INFORMATION:**

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## I. Background

The National Traffic and Motor Vehicle Safety Act ("Safety Act") (49 U.S.C. 30101 et seq.) authorizes NHTSA to issue safety standards for new motor vehicles and new items of motor vehicle equipment. Each FMVSS standard must be practicable, meet the need for motor vehicle safety, and be stated in objective terms. NHTSA does not endorse any vehicles or items of equipment. Further, NHTSA does not approve or certify vehicles or equipment. Instead, the Safety Act establishes a "self-certification" process under which each manufacturer is responsible for certifying that its products meet all applicable safety standards.

Petitions for rulemaking are governed by 49 CFR 552. Pursuant to Part 552, the agency conducts a technical review of the petition, which may consist of an analysis of the material submitted, together with information already in possession of the agency. In deciding whether to grant or deny a petition, the agency considers this technical review as well as appropriate factors, which include, among others, allocation of agency resources and agency priorities.[1]

## II. Petitions for Rulemaking

SBTC submitted a letter, dated September 27, 2021, that includes two rulemaking petitions pursuant to 49 CFR 552 and a defect investigation petition pursuant to 49 CFR 554. This notice focuses on the two rulemaking petitions filed by the petitioner. The other petition for opening a defect investigation will be addressed in a separate notice.

The two petitions for rulemaking focus on alleged cybersecurity vulnerabilities in commercial motor vehicles and commercial motor vehicle equipment. The first petition for rulemaking requests that NHTSA establish a new FMVSS to regulate the installation of

[1] 49 CFR § 552.8.

electronic logging devices (ELDs) in commercial motor vehicles. Because NHTSA regulates motor vehicles and items of motor vehicle equipment, not the "installation" of any such devices, NHTSA is interpreting SBTC's request as asking the agency to issue a performance standard for ELDs. The second petition for rulemaking requests that NHTSA amend existing FMVSSs for braking and accelerator control systems (i.e., FMVSS Nos. 105[2], 121[3], and 124[4]). The petitioner contended that these safety standards should be amended because the factory-installed braking and acceleration systems are out of date, asserting that the systems are vulnerable to telematics hacking. As supporting references, SBTC included various information, such as research studies, media publications, and government publications.

## III. NHTSA's Analysis and Decision

After a thorough review of the petitions and accompanying materials provided by the petitioner, NHTSA has decided to deny the SBTC's rulemaking petitions based on a lack of sufficient data necessary to proceed under the Motor Vehicle Safety Act, 49 U.S.C. § 30111(a) and (b) the allocation of agency resources. The following sections detail the primary reasons for the agency's decision.

### A. SBTC's petition to establish a new FMVSS for the installation of ELDs and NHTSA's rationale for denying this petition

*1. SBTC has not provided sufficient information to establish a safety need associated with ELD installation.*

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[2] FMVSS No. 105, Hydraulic and Electric Brake Systems, establishes requirements for hydraulic and electric service brake systems, and associated parking brake systems to ensure safe braking performance. This safety standard applies to multipurpose passenger vehicles, trucks, and buses with a gross vehicle weight rating (GVWR) greater than 7,716 pounds.

[3] FMVSS No. 121, Air Brake Systems, establishes performance and equipment requirements for braking systems on vehicles, such as trucks and buses with a GVWR less than 29,000 pounds, and trailers equipped with air brake systems to ensure safe braking performance under normal and emergency conditions.

[4] FMVSS No. 124, Accelerator Control Systems, establishes requirements for the return of a vehicle's throttle to idle position when the driver removes the actuating force or in the event of severance/disconnection of the accelerator control system. This standard applies to passenger cars, multi-purpose passenger vehicles, trucks, and buses.

NHTSA reviewed all sources provided by the petitioner to determine whether a safety need exists that could be resolved by promulgating a FMVSS. In its first rulemaking petition, SBTC contended that the hacking vulnerability and weak encryption of ELDs may lead to safety-critical attacks (i.e., hazards) in commercial vehicles. The references cited by the petitioner do not provide support for such assertion or sufficient information, such as the nature, cause, size, and potential severity of the alleged hazard. As an example, SBTC argued that an adversary can hack into "a vulnerable ELD system" and take control of a commercial vehicle based on an academic research paper ("Burakova") .[5] Contrary to the out-of-context excerpt petitioner included in its petition, this paper discusses the possibilities of using **physical** access to a SAE J1939 bus.[6] The paper makes no specific assertions concerning wireless or remote attacks, only that "Further research is needed." Also, the paper does not discuss vulnerabilities in any specific devices that span wireless and J1939 networks, ELD or otherwise. As such, it is unclear how this paper supports petitioner's assertion that a safety standard is necessary for ELDs. Additionally, petitioner also provided a 2021 Freightwaves article that describes efforts by trucking companies to alter ELD logs with physical access. There is no mention of accessing vehicle J1939 busses in that article. There is no mention of accessing ELD devices remotely either. Aside from the potential for falsified logs, the regulation of which is not within the jurisdiction of NHTSA, the article does not provide evidence of the petitioner's assertion that ELDs represent a threat to vehicle control or vehicle safety at all. Furthermore, several of the articles provided had nothing to do with heavy duty vehicles or ELDs. Therefore, NHTSA does not believe the information provided by petitioner identifies a safety need that issuing a Federal motor vehicle safety standard for ELDs might resolve.[7]

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[5] Y. Burakova et al., *Truck Hacking: An Experimental Analysis of the SAE J1939 Standard*, (2016).
[6] The excerpt included by the petitioner in support of its petitions implied that petitioner was concerned with wireless or "remote" attacks.
[7] *See* 49 U.S.C. § 30111(a).

*2. SBTC has not provided any information on the practical means or solutions by which NHTSA might resolve petitioner concerns.*

As stated in previous NHTSA guidance,[8] the petition should describe technologies and designs that are or will be available to comply with the performance requirements and demonstrate the level of effectiveness of those technologies and designs in addressing the claimed concerns regarding the installation of ELDs. However, the petitioner provided only high-level, anecdotal information about their broad, general concerns. Furthermore, petitioner failed to provide any solutions to those concerns.

*3. SBTC has not provided the substance that a standard would be comprised of.*

As stated in previous NHTSA guidance,[9] the petition should describe the requested standard (i.e., the performance requirements, test conditions, and test procedures), the supporting research and reasons why those performance requirements, test conditions, and test procedures are appropriate and provide proposed regulatory text. However, SBTC failed to provide any substantive information regarding what a new FMVSS would be comprised of that would resolve the alleged concerns regarding the ELD installation.

**B. SBTC's petition to amend the existing FMVSS Nos. 105, 121, and 124, and NHTSA's rationale for denying this petition**

Like the first petition for a new FMVSS, this second petition should demonstrate a safety need that could be resolved by amending the existing FMVSSs. However, SBTC merely contended that the alleged vulnerabilities of telematics systems could impact braking and acceleration control systems and did not provide sufficient information or evidence of such attacks occurring in heavy vehicles. The resources provided by the petitioner cover a wide range of potential telematics vulnerabilities in light passenger vehicles, many of which are directly

[8] *See* https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/understanding_nhtsas_current_regulatory_tools-tag.pdf.
[9] *Id*.

impacted by specific vehicle architectures (i.e., make and model specific, in many instances). Petitioner has failed to provide evidence that indicates there is a general safety need related to telematics units in heavy vehicles that warrants modification of existing FMVSS. Without an identified safety need, it is unclear how petitioner's request would meet the need for safety.[10]

Similarly, the petitioner failed to provide practical means or solutions by which NHTSA could resolve its concern. SBTC provided only high-level, anecdotal information about its broad, general concerns regarding the interaction between telematics and heavy vehicle braking and acceleration control systems regulated by the existing FMVSSs. SBTC also failed to provide any substantive information regarding the amendments of the existing FMVSSs to resolve its concerns.

Therefore, NHTSA is denying both of the SBTC's rulemaking petitions because they lacked sufficient information as discussed above. Furthermore, the agency is discretionarily allocating and managing its vehicle safety resources to those rulemakings that are mandated by Congress and others that have a demonstrated safety need with solutions available to resolve those needs.

**Authority**: 49 U.S.C. 30113; delegation of authority at 49 CFR 1.95.

Steven S. Cliff,
Deputy Administrator.

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[10] *See* 49 U.S.C. § 30111(a).